

BATCH

RAW SEQUENCE LISTING
 PATENT APPLICATION: US/09/724,157

DATE: 04/18/2001
 TIME: 14:34:36

Input Set : N:\Crf3\RULE60\09724157.txt
 Output Set: N:\CRF3\04182001\I724157.raw

#1 1/2

SEQUENCE LISTING

ENTERED

3 (1) GENERAL INFORMATION:

5 (i) APPLICANT: Clark, Ross G1
 6 Lowman, Henry B.
 7 Robinson, Iain C.A.F.

9 (ii) TITLE OF INVENTION: Insulin-like Growth Factor Agonist Molecules

11 (iii) NUMBER OF SEQUENCES: 109

13 (iv) CORRESPONDENCE ADDRESS:

14 (A) ADDRESSEE: Genentech, Inc.

15 (B) STREET: 1 DNA Way

16 (C) CITY: South San Francisco

17 (D) STATE: California

18 (E) COUNTRY: USA

19 (F) ZIP: 94080

21 (v) COMPUTER READABLE FORM:

22 (A) MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk

23 (B) COMPUTER: IBM PC compatible

24 (C) OPERATING SYSTEM: PC-DOS/MS-DOS

25 (D) SOFTWARE: WinPatin (Genentech)

27 (vi) CURRENT APPLICATION DATA:

C--> 28 (A) APPLICATION NUMBER: US/09/724,157

C--> 29 (B) FILING DATE: 28-Nov-2000

30 (C) CLASSIFICATION:

32 (vii) PRIOR APPLICATION DATA:

33 (A) APPLICATION NUMBER: 09/052888

34 (B) FILING DATE: 31-Mar-1998

36 (viii) ATTORNEY/AGENT INFORMATION:

37 (A) NAME: Hasak, Janet E.

38 (B) REGISTRATION NUMBER: 28,616

39 (C) REFERENCE/DOCKET NUMBER: P1071P1

41 (ix) TELECOMMUNICATION INFORMATION:

42 (A) TELEPHONE: 650/225-1896

43 (B) TELEFAX: 650/252-9881

44 (2) INFORMATION FOR SEQ ID NO: 1:

46 (i) SEQUENCE CHARACTERISTICS:

47 (A) LENGTH: 21 amino acids

48 (B) TYPE: Amino Acid

49 (D) TOPOLOGY: Linear

51 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1:

53 Glu Leu Asp Gly Trp Val Cys Ile Lys Val Gly Glu Gln Asn Leu

54 1 5 10 15

56 Cys Tyr Leu Ala Glu Gly

57 20 21

59 (2) INFORMATION FOR SEQ ID NO: 2:

61 (i) SEQUENCE CHARACTERISTICS:

62 (A) LENGTH: 21 amino acids

63 (B) TYPE: Amino Acid

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64      (D) TOPOLOGY: Linear
66      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2:
68  Trp Phe Lys Thr Val Cys Tyr Glu Trp Glu Asp Glu Val Gln Cys
69      1             5             10             15
71  Tyr Thr Leu Glu Glu Gly
72             20  21
74 (2) INFORMATION FOR SEQ ID NO: 3:
76      (i) SEQUENCE CHARACTERISTICS:
77          (A) LENGTH: 21 amino acids
78          (B) TYPE: Amino Acid
79          (D) TOPOLOGY: Linear
81      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3:
83  Arg Val Gly Ala Tyr Ile Ser Cys Ser Glu Thr Glu Cys Trp Val
84      1             5             10             15
86  Glu Asp Leu Leu Asp Gly
87             20  21
89 (2) INFORMATION FOR SEQ ID NO: 4:
91      (i) SEQUENCE CHARACTERISTICS:
92          (A) LENGTH: 20 amino acids
93          (B) TYPE: Amino Acid
94          (D) TOPOLOGY: Linear
96      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 4:
98  Val Ala Trp Glu Val Cys Trp Asp Arg His Asp Gln Gly Tyr Ile
99      1             5             10             15
101 Cys Thr Thr Asp Ser
102             20
104 (2) INFORMATION FOR SEQ ID NO: 5:
106      (i) SEQUENCE CHARACTERISTICS:
107          (A) LENGTH: 18 amino acids
108          (B) TYPE: Amino Acid
109          (D) TOPOLOGY: Linear
111      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 5:
113  Ala Trp Glu Val Cys Trp Asp Arg His Gln Gly Tyr Ile Cys Thr
114      1             5             10             15
116  Thr Asp Ser
117             18
119 (2) INFORMATION FOR SEQ ID NO: 6:
121      (i) SEQUENCE CHARACTERISTICS:
122          (A) LENGTH: 15 amino acids
123          (B) TYPE: Amino Acid
124          (D) TOPOLOGY: Linear
126      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 6:
128  Cys Trp Asp Arg His Asp Gln Gly Tyr Ile Cys Thr Thr Asp Ser
129      1             5             10             15
131 (2) INFORMATION FOR SEQ ID NO: 7:
133      (i) SEQUENCE CHARACTERISTICS:
134          (A) LENGTH: 18 amino acids
135          (B) TYPE: Amino Acid
136          (D) TOPOLOGY: Linear

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138      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 7:
140  Glu Glu Ser Glu Cys Phe Glu Gly Pro Gly Tyr Val Ile Cys Gly
141      1          5          10          15
143  Leu Val Gly
144      18
146  (2) INFORMATION FOR SEQ ID NO: 8:
148      (i) SEQUENCE CHARACTERISTICS:
149          (A) LENGTH: 18 amino acids
150          (B) TYPE: Amino Acid
151          (D) TOPOLOGY: Linear
153      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 8:
155  Asp Met Gly Val Cys Ala Asp Gly Pro Trp Met Tyr Val Cys Glu
156      1          5          10          15
158  Trp Thr Glu
159      18
161  (2) INFORMATION FOR SEQ ID NO: 9:
163      (i) SEQUENCE CHARACTERISTICS:
164          (A) LENGTH: 18 amino acids
165          (B) TYPE: Amino Acid
166          (D) TOPOLOGY: Linear
168      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 9:
170  Ser Glu Glu Val Cys Trp Pro Val Ala Glu Trp Tyr Leu Cys Asn
171      1          5          10          15
173  Met Trp Gly
174      18
176  (2) INFORMATION FOR SEQ ID NO: 10:
178      (i) SEQUENCE CHARACTERISTICS:
179          (A) LENGTH: 15 amino acids
180          (B) TYPE: Amino Acid
181          (D) TOPOLOGY: Linear
183      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 10:
185  Ser Glu Glu Val Cys Trp Pro Val Ala Glu Trp Tyr Leu Cys Asn
186      1          5          10          15
188  (2) INFORMATION FOR SEQ ID NO: 11:
190      (i) SEQUENCE CHARACTERISTICS:
191          (A) LENGTH: 15 amino acids
192          (B) TYPE: Amino Acid
193          (D) TOPOLOGY: Linear
195      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 11:
197  Val Cys Trp Pro Val Ala Glu Trp Tyr Leu Cys Asn Met Trp Gly
198      1          5          10          15
200  (2) INFORMATION FOR SEQ ID NO: 12:
202      (i) SEQUENCE CHARACTERISTICS:
203          (A) LENGTH: 12 amino acids
204          (B) TYPE: Amino Acid
205          (D) TOPOLOGY: Linear
207      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 12:
209  Val Cys Trp Pro Val Ala Glu Trp Tyr Leu Cys Asn
210      1          5          10          12

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212 (2) INFORMATION FOR SEQ ID NO: 13:
214     (i) SEQUENCE CHARACTERISTICS:
215         (A) LENGTH: 18 amino acids
216         (B) TYPE: Amino Acid
217         (D) TOPOLOGY: Linear
219     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 13:
221 Thr Gly Val Asp Cys Gln Cys Gly Pro Val His Cys Val Cys Met
222   1             5             10             15
224 Asp Trp Ala
225             18
227 (2) INFORMATION FOR SEQ ID NO: 14:
229     (i) SEQUENCE CHARACTERISTICS:
230         (A) LENGTH: 18 amino acids
231         (B) TYPE: Amino Acid
232         (D) TOPOLOGY: Linear
234     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 14:
236 Thr Val Ala Asn Cys Asp Cys Tyr Met Pro Leu Cys Leu Cys Tyr
237   1             5             10             15
239 Asp Ser Asp
240             18
242 (2) INFORMATION FOR SEQ ID NO: 15:
244     (i) SEQUENCE CHARACTERISTICS:
245         (A) LENGTH: 15 amino acids
246         (B) TYPE: Amino Acid
247         (D) TOPOLOGY: Linear
249     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 15:
251 Cys Arg Ala Gly Pro Leu Gln Trp Leu Cys Glu Lys Tyr Phe Gly
252   1             5             10             15
254 (2) INFORMATION FOR SEQ ID NO: 16:
256     (i) SEQUENCE CHARACTERISTICS:
257         (A) LENGTH: 19 amino acids
258         (B) TYPE: Amino Acid
259         (D) TOPOLOGY: Linear
261     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 16:
263 Ser Glu Val Gly Cys Arg Ala Gly Pro Leu Gln Trp Leu Cys Glu
264   1             5             10             15
266 Lys Tyr Phe Gly
267             19
269 (2) INFORMATION FOR SEQ ID NO: 17:
271     (i) SEQUENCE CHARACTERISTICS:
272         (A) LENGTH: 400 base pairs
273         (B) TYPE: Nucleic Acid
274         (C) STRANDEDNESS: Double
275         (D) TOPOLOGY: Linear
277     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 17:
280 TCACGTAAAA AGGGTATCTA GAATTATGAT GATTACTCTG CGCAAAC TTC 50
282 CTCTGGCGGT TGCCGTCGCA GCGGGCGTAA TGTCTGCTCA GGCCATGGCC 100
284 GGTCCCGAAA CTCTGTGCGG TGCTGAACTG GTTGACGCTC TGCAGTTCGT 150
286 ATGTGGTGAT CGAGGCTTCC TGTTCACAAA ACCGACTGGG GCTGGATCCT 200

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288 CCTCTCGTCG TGCTCCCCAG ACTGGTATTG TTGACGAATG CTGCTTTCGT 250
 290 TCTTGCGACC TCGCTCGTCT GGAAATGTAT TCGCTCCCC TGAAACCCGC 300
 292 TAAATCTGCT TAGAAGCTCC TAACGCTCGG TTGCCGCCG GCGTTTTTTA 350
 294 TTGTTAACTC ATGTTTGACA GCTTATCATC GATAAGCTTT AATGCGGTAG 400

296 (2) INFORMATION FOR SEQ ID NO: 18:

298 (i) SEQUENCE CHARACTERISTICS:

299 (A) LENGTH: 95 amino acids

300 (B) TYPE: Amino Acid

301 (D) TOPOLOGY: Linear

303 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 18:

305 Met Met Ile Thr Leu Arg Lys Leu Pro Leu Ala Val Ala Val Ala
 306 1 5 10 15
 308 Ala Gly Val Met Ser Ala Gln Ala Met Ala Gly Pro Glu Thr Leu
 309 20 25 30
 311 Cys Gly Ala Glu Leu Val Asp Ala Leu Gln Phe Val Cys Gly Asp
 312 35 40 45
 314 Arg Gly Phe Leu Phe Asn Lys Pro Thr Gly Ala Gly Ser Ser Ser
 315 50 55 60
 317 Arg Arg Ala Pro Gln Thr Gly Ile Val Asp Glu Cys Cys Phe Arg
 318 65 70 75
 320 Ser Cys Asp Leu Arg Arg Leu Glu Met Tyr Cys Ala Pro Leu Lys
 321 80 85 90
 323 Pro Ala Lys Ser Ala
 324 95

326 (2) INFORMATION FOR SEQ ID NO: 19:

328 (i) SEQUENCE CHARACTERISTICS:

329 (A) LENGTH: 5115 base pairs

330 (B) TYPE: Nucleic Acid

331 (C) STRANDEDNESS: Double

332 (D) TOPOLOGY: Linear

334 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 19:

337 GAATTCAACT TCTCCATACT TTGGATAAGG AAATACAGAC ATGAAAAATC 50
 339 TCATTGCTGA GTTGTTATTT AAGCTTGCCC AAAAGAAGA AGAGTCGAAT 100
 341 GAACTGTGTG CGCAGGTAGA AGCTTTGGAG ATTATCGTCA CTGCAATGCT 150
 343 TCGCAATATG GCGCAAAATG ACCAACAGCG GTTGATTGAT CAGGTAGAGG 200
 345 GGGCGCTGTA CGAGGTAAAG CCCGATGCCA GCATTCCTGA CGACGATACG 250
 347 GAGCTGCTGC GCGATTACGT AAAGAAGTTA TTGAAGCATC CTCGTCAGTA 300
 349 AAAAGTTAAT CTTTTCAACA GCTGTCATAA AGTTGTCACG GCCGAGACTT 350
 351 ATAGTCGCTT TGTTTTTATT TTTAATGTA TTTGTAAC TAACGCAAGT 400
 353 TCACGTAAAA AGGGTATCTA GAATTATGAT GATTACTCTG CGCAAACCTC 450
 355 CTCTGGCGGT TGCCGTCGCA GCGGGCGTAA TGTCTGCTCA GGCCATGGCC 500
 357 GGTCCCGAAA CTCTGTGCGG TGCTGAACTG GTTGACGCTC TGCAGTTCGT 550
 359 ATGTGGTGAT CGAGGCTTCC TGTTCACAAA ACCGACTGGG GCTGGATCCT 600
 361 CCTCTCGTCG TGCTCCCCAG ACTGGTATTG TTGACGAATG CTGCTTTCGT 650
 363 TCTTGCGACC TCGCTCGTCT GGAAATGTAT TCGCTCCCC TGAAACCCGC 700
 365 TAAATCTGCT TAGAAGCTCC TAACGCTCGG TTGCCGCCG GCGTTTTTTA 750
 367 TTGTTAACTC ATGTTTGACA GCTTATCATC GATAAGCTTT AATGCGGTAG 800
 369 TTTATCACAG TTAAATTGCT AACGCAGTCA GGCACCGTGT ATGAAATCTA 850
 371 ACAATGCGCT CATCGTCATC CTCGGCACCG TCACCCTGGA TGCTGTAGGC 900

VERIFICATION SUMMARY

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Input Set : N:\Crf3\RULE60\09724157.txt

Output Set: N:\CRF3\04182001\I724157.raw

L:28 M:220 C: Keyword misspelled or invalid format, [(A) APPLICATION NUMBER:]
L:29 M:220 C: Keyword misspelled or invalid format, [(B) FILING DATE:]
L:807 M:246 W: Invalid value of Alpha Sequence Header Field, '[MOLECULE TYPE:]', SeqNo=23
L:825 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24
L:840 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:25
L:843 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:25
L:855 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26
L:858 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26
L:870 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27
L:873 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27
L:885 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28
L:888 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28
L:900 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:29
L:903 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:29
L:915 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:30
L:918 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:30
L:930 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:31
L:933 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:31
L:945 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:32
L:948 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:32
L:960 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:33
L:963 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:33
L:990 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:35
L:1015 M:246 W: Invalid value of Alpha Sequence Header Field, '[MOLECULE TYPE:]', SeqNo=37
L:1138 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:45
L:1141 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:45